

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

DESCRIPTIONS OF PROPOSED NEW BIRDS FROM
PERU, BOLIVIA, BRAZIL, AND COLOMBIA.¹

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Continued study² of the birds collected by the Yale University-National Geographic Expedition to the Urubamba region of Peru, and, incidentally, of other collections received by the American Museum from South America, has led to the conclusions presented in the following pages. The color terms employed are those of Ridgway's "Color Standards and Color Nomenclature" (Washington, 1912).

I acknowledge, gratefully, the loan of specimens for comparison from the Museum of Comparative Zoology, through the courtesy of Mr. Outram Bangs.

***Micropus peruvianus*, new species.**

Specific characters.—Resembling *Micropus andecolus* (Lafr. & d'Orb.), but tail shorter, less deeply forked, white areas of the plumage without buffy tints, forehead darker, basal under tail-coverts with much less white.

Type.—No. 145,007, Am. Mus. Nat. Hist., ♀ ad., Ollantaytambo, alt. 9700 ft., Peru, July 22, 1916; F. M. Chapman.

Description of type.—General coloration fuscous, the wings and tail with olivaceous reflections; sides of the nape white more or less tinged with dusky; auriculars dusky; rump white; upper tail-coverts like the back; outer tail-feathers lacking the greenish lustre of the others and paler basally; inner secondaries paler than outer quills and faintly tipped with whitish; under wing-coverts dusky, the smaller ones browner; under parts white, the sides and flanks more or less dusky; longer lower tail-coverts fuscous, shorter ones white basally, broadly tipped with dusky or fuscous; depth of tail-furcation 12.5 mm.

¹See also "Descriptions of Proposed New Birds from Peru, Bolivia, Argentina, and Chile." Bull. Am. Mus. Nat. Hist., XLI, 1919, pp. 323-333.

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Description of male.—The male resembles the female in color and in size.

Specimens examined.—*Micropus peruvianus*. Peru: Type locality, 1 ♂, 1 ♀; Huaracundo Cañon, 10,000 ft., 1 ♂, 1 ?; Torontoy, 8000 ft., 2 ♀.

Micropus andecolus. Bolivia: Parotani, 8800 ft., Prov. Cochabamba, 2 ♂; Vinto, 8600 ft., Prov. Cochabamba, 2 ♂. Argentina: Tilcara, 8000 ft., Prov. Jujuy, 1 ♂; Angaco Sud, 2000 ft., Prov. San Juan, 2 ♂, 1 ♀; Mendoza, 1.

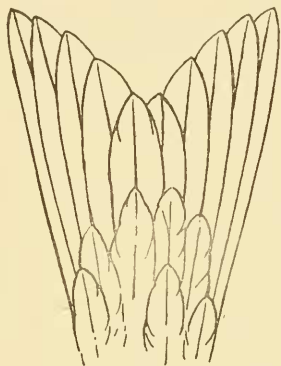


FIG. 1.—Tail of *Micropus peruvianus*.

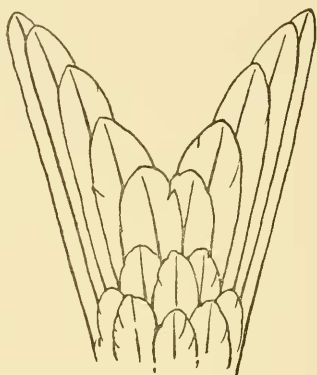


FIG. 2.—Tail of *Micropus andecolus*.
(Both natural size.)

Remarks.—The type-locality¹ of *Cypselus andecolus* is the Andes of La Paz, Bolivia. I have no specimens from La Paz, but faunal considerations lead me to believe that four specimens from the Andes at Cochabamba may be accepted as typically representing this bird. That the describers did not mention the buffy tint which characterizes our Bolivian and Argentine specimens is not surprising since it might well be considered as adventitious. While their figure of the species does not therefore show a buffy tint on the white areas, it does show a more deeply forked tail than is exhibited by any of our Peruvian birds, and this in spite of the fact that it is somewhat smaller than natural size.

Although the characters separating the Peruvian and Bolivian birds seem to me to be of specific value, the birds nevertheless are obviously representative forms, and it is not probable, therefore, that both would be found at the same locality. If this be true, there can be little doubt of the essential identity of the La Paz and Cochabamba birds. The latter agree minutely with specimens from Argentina, and if my belief that Cochabamba specimens are typical of *andecolus* is correct, it of course follows that "*Apus andecolus dinellii*" of Hartert, from Jujuy and Mendoza, Argentina, is a pure synonym of *andecolus* (Lafr. & d'Orb.). Hartert writes (Bull. B. O. C., XXIII, 1908, p. 43): "The measurements of this species [= *dinellii*] are the same as in *A. a. andecolus*," indicating that the birds which he identified as *andecolus* are not the same as the bird from Peru which I here describe.

¹The type is not in the Museum of Comparative Zoology at Cambridge.

The appended measurements show the constancy of the differences in length and depth of furcation of the tail in the two forms, characters on which, chiefly, I base my belief of their specific distinctness.

MEASUREMENTS.

Place.	Sex.	Wing.	Tail.	Depth of fork.
Ollantaytambo, Peru	♂ ¹	134	54	13
Huaracondo Cañon, Peru	♂ ¹	136	54	14
Vinto, Prov. Coch., Bol.	♂ ²	143	66.5	22.5
" " "	♂ ²	139	67	
Parotani " "	♂ ²	143	66.5	19.5
" " "	♂ ²	141	64	19
Angaco Sud, Prov. San Juan, Arg.	♂ ²	138	64	20
" " "	♂ ²	142	64	23
Mendoza, Argentina	♂ ²	144.5	67	21.5
Torontoy, Peru	♀ ¹	131	54	13
" " "	♀ ¹	134	56	14
Ollantaytambo, Peru	♀ ¹	139	54	12.5
Angaco Sud, Prov. San Juan, Arg.	♀ ²	140	61	22

Grallaria watkinsi, new species.

Specific characters.—Resembling *Grallaria ruficapilla albiloris* Tacx., but crown paler, more sharply defined from back, and with buff shaft-streaks, back more olivaceous and usually with fine shaft-streaks; ear-coverts dusky, tarsi and toes (in dried skins) pale brown, not dark blackish brown; wing and tail averaging shorter, tarsus and bill longer.

Type.—No. 163,084, Am. Mus. Nat. Hist., ♂ ad., Milagros, 2200 ft., Prov. Piura (near Prov. Tumbes), Peru, July 7, 1919; H. Watkins.

Description of type.—Crown and nape bright ochraceous-tawny, clearly defined from the Saccardo's olive of the back and rump; forehead tipped with black, the feathers, except in the center, basally white; whole anteorbital region white, sharply tipped with black; ring around eye white, more or less tipped with black; auriculars dusky, basally white and with traces of buffy on the shafts; wings and tail of much the same color as the back; feathers of the crown and back with buff shafts; the rump with white shaft-streaks; lower wing-coverts and inner webs of wing-quills (except outer primary) deep ochraceous-buff; under parts white, faintly tinted with buff, throat immaculate; malar streaks blackish and sides of the throat streaked with blackish; breast, sides and flanks widely margined with the color of the back, bordered internally, especially on the sides and flanks, with a narrow black line and, particularly on the breast, with rusty ochraceous; center of the belly and lower tail-coverts practically unmarked; tibiae brownish olive externally, whitish internally; tarsi and toes pale brownish; maxilla black; mandible horn color.

Description of female.—The female resembles the male in size and color.

Specimens examined.—*Grallaria watkinsi*. Peru: Type locality, 5 ♂, 1 ♀; Alamor, 1 ♂.

¹*Micropus peruvianus*.

²*Micropus andecolus*.

Grallaria ruficapilla albiloris. Peru: Levanto (near Chachapoyas), 1 ♂; Tabaconas (near Huancabamba), 1 ♀.

Grallaria ruficapilla ruficapilla. Ecuador: Zaruma, Prov. Loja, 1 ♀; "Ambato," 1; Guala, 1 ♂, 1 ?; Colombia: 16 specimens of both sexes.

MEASUREMENTS.

	Wing.	Tail.	Tarsus.	Culmen.
<i>Grallaria watkinsi</i> ¹	93.5-96	49-53	50-55	24-25
<i>Grallaria ruficapilla albiloris</i> ²	99.5	62	46	23
<i>Grallaria watkinsi</i> ³	92	52	51	24
<i>Grallaria ruficapilla albiloris</i> ⁴	96	55	51	24
<i>Grallaria ruficapilla ruficapilla</i> ⁵	95	49	47	23

Remarks.—Our material clearly indicates the intergradation of *ruficapilla ruficapilla* with *albiloris*. Of the latter, a specimen from Levanto, near Chachapoyas, received by us from von Berlepsch and labeled by him "*Grallaria albiloris*," may be considered topotypical of that form, since Taczanowski himself records specimens from near Chachapoyas (Orn. Perou, II, p. 83). Callacate, the type-locality of *albiloris*, is on the western slopes, Levanto on the eastern slopes of the Marañon Valley.

A specimen from Tabaconas, Peru, further north on Amazonian drainage, has more black on the breast, less white on the lores, and a darker crown than the Levanto bird, and thus shows a definite approach toward *ruficapilla*, while a specimen from Zaruma, Prov. Loja, has the white lores of *albiloris*, but in other respects agrees with *ruficapilla*. The lores are whitish also in a Guala specimen, and in two from Ricaurte, southwestern Colombia. Taczanowski (*l. c.*) comments on the resemblance of west Ecuadorian specimens to *albiloris*, and we may, I think, accept the intergradation of that race and *ruficapilla* as essentially proven.

I dwell somewhat upon this fact for it has an interesting bearing on the status of the bird here described. Zaruma, whence comes the specimen of *ruficapilla* mentioned above, is only about sixty miles from Milagros, the type-locality of *watkinsi*, but the latter is less like the Zaruma bird than it is like the Levanto specimen from the Marañon Valley. Milagros is on the Pacific slope of the Western Andes, Zaruma on the eastern side of the same range. Whether the two localities are connected faunally, I am unable to say, but the specimens from Milagros show characters which suggest the complete segregation of a form which, while representing *Grallaria ruficapilla*, is specifically distinct from it. It gives me peculiar pleasure to dedicate this interesting new bird to its collector, Mr. Harry Watkins, who for nearly twenty years has devoted himself to zoological research in Peru, and who for the past three years has been the efficient representative there of the American Museum of Natural History.

¹ 5 males from Milagros, Peru.

² 1 male from Levanto, Peru.

³ 1 female from Milagros, Peru.

⁴ 1 female from Tabaconas, Peru.

⁵ 1 female from Zaruma, Ecuador.

Grallaricula boliviana, new species.

Specific characters.—Most nearly resembling *Grallaricula costaricensis*, but not closely related to any known species. Throat ochraceous streaked with black, a white breast-patch; lower breast ochraceous, the feathers sharply margined with black, giving a scaled appearance, much as in *Premnoplex guttata*.

Type.—No. 137,177, Am. Mus. Nat. Hist., ♂ ad., Incachaca, 7700 ft., Prov. Cochabamba, Bolivia, May 16, 1915; Miller & Boyle.

Description of type.—Upper parts between brownish olive and light brownish olive, the crown with darker centers, sides of the forehead basally ochraceous; lores and a narrow eye-ring ochraceous, minutely tipped with black; tail fuscous, the outer feathers externally margined with olive-brown; wings fuscous, externally margined with olive-brown, the inner margins of all but the outer quills ochraceous-buff; under wing-coverts, bend of the wing and outer margin of alula deeper; ear-coverts tinged with cinnamon-brown; throat ochraceous, loosely streaked with black; a narrow white breast-patch; a broad ochraceous band across the lower breast, the feathers sharply bordered with black; flanks more olivaceous, with some buffy feathers obscurely margined with blackish; center of the abdomen white; tibiae brownish olive; lower tail-coverts buffy; feet dark brown; maxilla brownish black; mandible yellowish. Wing 60; tail 28; tarsus 21; culmen 12.5 mm.

Specimens examined.—*Grallaricula boliviana*, the type. *Grallaricula costaricensis*, Costa Rica, 1; Veragua, 1.

Remarks.—The discovery of this very distinct species introduces a new type of coloration into the genus *Grallaricula*, and extends the known range of the genus from Ecuador to Bolivia, a distance of approximately 1000 miles. Doubtless this gap will in time be filled by the discovery of one or more species of these elusive little birds in Peru.

Synallaxis stictothorax piurae, new subspecies.

Subspecific characters.—Similar to *Synallaxis stictothorax stictothorax* Sel., but back more rufescent; wings more widely margined with bright cinnamon-rufous, this color occupying all the outer web of the inner primaries and both webs of the secondaries basally; tail almost wholly cinnamon-rufous, the blackish area, which occupies all the inner web of the four central rectrices in *stictothorax*, reduced to a small, faint, terminal patch.

Type.—No. 163,085, Am. Mus. Nat. Hist., ♀, Chilaco, near Samate on the Rio Chira, Prov. Piura, Peru, May 27, 1919.

Specimens examined.—*Synallaxis stictothorax piurae*. Peru: Type locality, 1 ♂, 3 ♀, 1 ?; Samate, Prov. Piura, 1 ?.

Synallaxis stictothorax stictothorax. Ecuador: Bahia de Caraque, Prov. Manavi, 5; Guayaquil, 4 (topotypes); Daule, 1; Puna Island, 6; Machala, 1.

Remarks.—Some specimens of *stictothorax stictothorax* have the secondaries basally rufous, but this character is apparently never so highly developed as in *piurae* in which the wing, when closed, appears to be almost

wholly rufous. The characters shown by the tail are pronounced and constant, all our sixteen specimens of *stictothorax* having the inner vanes of the four central feathers black or blackish, a mark which has almost disappeared in our specimens of *piuræ*. The Machala specimen is clearly referable to *stictothorax* and brings the known range of this form almost to the Peruvian boundary. It is probable that the areas occupied by the two races are divided by the Cerro de Amotape.

***Phacellodomus striaticeps griseipectus*, new subspecies.**

Subspecific characters.—Throat and breast grayish vinaceous-buff, instead of being essentially pure white; flanks and abdominal region much deeper, the former nearly ochraceous-tawny; ear-coverts and sides of the neck grayer, less cinnamon-rufous; upper parts averaging darker, with less cinnamon-rufous, especially anteriorly.

Type.—No. 145,210, Am. Mus. Nat. Hist., ♂ ad., July 2, 1916; Tica-Tica, 11,500 ft., near Cuzco, Peru. F. M. Chapman.

Specimens examined.—*Phacellodomus striaticeps griseipectus*. Peru: Type locality, 5; La Raya, 1; Calca, 2; Cuzco, 5; Anta, 1; Huaracundo Cañon, 1.

Phacellodomus striaticeps striaticeps. Bolivia: Cuchacancha, 11,000 ft., 7; Parotani, 8800 ft., 4; Vinto, 8600 ft., 3. Argentina: Tilcara, 8000 ft., Prov. Jujuy, 2; Tafi del Valle, 7000 ft., Prov. Tucuman, 3.

Remarks.—Our excellent series of *Phacellodomus striaticeps* shows that the characters on which this proposed new race is founded are both pronounced and constant. The marked differentiation in the color of the under parts is evidently not due to the earthy stain which often is found upon the feathers of these and other ground-inhabiting species of this family. Earth-stained birds are found in the series of both forms, and its presence in no way obscures the real characters by which they may be distinguished.

***Hylocryptus*, new genus.**

Generic characters.—A typically furnariine bird; the difference in length between the inner and outer toes less than the difference between the

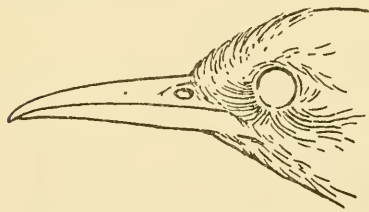


FIG. 3.—Bill of *Hylocryptus erythrocephalus*.
(Natural size)

latter and the middle toe; the nostril-entrance oval, non-operculate; apparently most nearly related to *Automolus* but with a longer, proportionately more slender bill, the gonydeal angle barely evident, the maxilla as well as mandible terminally decurved; the culmen from base decidedly longer than tarsus, its depth at the gonydeal angle less instead of more

than three times its length from nostril. Type, *Hylocryptus erythrocephalus*.

***Hylocryptus erythrocephalus*, new species.**

Specific characters.—In general coloration somewhat suggesting the *Automolus rubiginosus*-*A. nigricauda* group, but whole head and neck sharply defined in color from rest of the body; under parts grayish olive, etc.

Type.—No. 163,086, Am. Mus. Nat. Hist., ♀ ad., Alamor, 4300 ft., Peruvian-Ecuador boundary, July 14, 1919; H. Watkins.

Description of type.—Head all around, including nape, cheeks, auriculars, and throat between Sanford's brown and orange-rufous (throat more ochraceous-orange) clearly defined, especially on the nape and sides of the neck, from the Dresden-brown back and pale grayish olive under parts; rump tinged with orange-rufous passing into pure orange-rufous on the upper tail-coverts; rectrices slightly deeper in tone than head; wing-quills externally somewhat duller with a faint olivaceous tinge; inner webs and tips of primaries (all but base of outer ones) blackish; inner quills and wing-coverts wholly orange-rufous; bend of the wing and under wing-coverts ochraceous-orange; flanks and ventral region washed with the color of the back; lower tail-coverts ochraceous-orange; feet brownish black; maxilla dark brown, lighter terminally; mandible horn color. Wing 92; tail 83; tarsus 28; hind toe 21; outer toe 19.50; middle toe 26.5; inner toe, 17 (all with nail); culmen from base, 30; bill from nostril, 22; depth at gonydeal angle 6.5 mm.

Description of immature female.—A not fully adult female from Paletilla agrees in size with the type and differs in color only in the presence of narrow blackish terminal margins on the feathers of the occiput and under parts.

Specimens examined.—*Hylocryptus erythrocephalus*. Alamor, 1 ♀ ad., Paletilla, 1 ♀ ad., 1 ♀ im.

Automolus rubiginosus, *A. rufipectus*, *A. cinnamomeigula*, *A. nigricauda*, and other less nearly related species of the genus.

Remarks.—The type of coloration shown by this species is unlike that of any furnariine or dendrocolaptine bird known to me. It is conceivable, however, that an intensification of color which would obscure the contrast between the colors of the head and body, might produce some such result as appears in *Automolus nigricauda nigricauda* of western Ecuador. The latter, however, is a true *Automolus* of the *A. rubiginosus*-*A. rufipectus* group, with the bill no longer than the tarsus and with an ascending instead of decurved gonys; the tail-feathers, furthermore, are slightly stiffer.

***Xenops rutilus connectens*, new subspecies.**

Subspecific characters.—Intermediate between *Xenops rutilus rutilus* Licht., and *Xenops rutilus heterurus* Cab. & Hein., with the tail-pattern of the former and the general coloration of the latter.

Type.—No 137,347. Am. Mus. Nat. Hist., ♂ ad. Todos Santos 1300 ft., Prov. Cochabamba, Bolivia, July 27, 1915; Miller & Boyle.

Specimens examined.—*Xenops rutilus connectens*. Bolivia: Type locality, 3; Yungas 3600 ft., Prov. Cochabamba, 1.

Xenops rutilus rutilus. Brazil: Chapada, 15; near Corumbá, 2; São Paulo, 1.

Xenops rutilus heterurus. Colombia: 24. Trinidad: 1. Ecuador: Zaruma, 6; Naranjo, 1. Peru: Idma, 2; San Miguel Bridge (Urubamba Cañon), 3; San Miguel River, 1.

Xenops tenuirostris. Brazil: Barão Melgaco, Matto Grosso, 2; Rio Roosevelt, 1 (heretofore known only from the type).

Remarks.—This is a most interesting link between *Xenops rutilus rutilus* of Brazil, and *X. r. heterurus* of the Andes from southern Peru northward and northern South America. Like true *rutilus* it has only one pair of tail-feathers with the inner web wholly (or almost wholly) black. It differs from true *rutilus*, however, in being more olivaceous and more narrowly streaked below, in having the back darker, the crown black and more finely streaked. In general color characters it therefore resembles *heterurus*, but has only one pair instead of two pairs of rectrices, largely black.

***Xiphorhynchus triangularis bangsi*, new subspecies.**

Subspecific characters.—Similar to *Xiphorhynchus triangularis triangularis* (Lafr.), but general coloration, particularly of the upper parts, slightly less olivaceous, more rufescent; the bill largely whitish or horn-color, usually black only at the base and end of the maxilla; the buffy markings on the crown larger, the back with buffy shaft-streaks; the rump more rufous; the throat and markings of the under parts white; the markings of the breast smaller and not extending to the abdomen, which is narrowly streaked instead of spotted; under tail-coverts with fine, instead of broad shaft-streaks.

Type.—No. 137,388, Am. Mus. Nat Hist., ♀ ad., Yungas, alt. 3600 ft., Prov. Cochabamba, Bolivia, June 10, 1915; Miller & Boyle.

Range.—Subtropical zone of the eastern slope of the Andes in Bolivia and in Peru, at least north to Garita del Sol.

Specimens examined.—*Xiphorhynchus triangularis bangsi.* Bolivia: Yungas, type locality, 1; Locotal, 5800 ft., 1. Peru: San Miguel Bridge, Urubamba Cañon, 2; San Miguel River, 4500 ft., Urubamba Cañon, 1; San Miguel Road, 6000 ft., 1; Idma, above Sta. Ana, 5000 ft., 1.

Xiphorhynchus triangularis triangularis. Colombia: 34 specimens including the type and topotypical series. Ecuador: Zamora, Prov. Loja, 4.

Remarks.—Mr. Hellmayr's belief¹ that the type of Lafresnaye's "*Dendrocolaptes triangularis*" came from Bogotá, not Bolivia, as stated in the original description, is confirmed by an examination of Lafresnaye's type, now in the collection of the Museum of Comparative Zoology (No. 77,147; Lafr. Coll., No. 2275), whence it has been loaned me by Mr. Bangs. On the original label the words "Colombie, Bogota," are written over the word "Bolivia." Lafresnaye having discovered the error in the alleged type-locality apparently corrected it on the label of the type as he did also in his monograph of the group to which the bird in question belongs (Rev. Mag. Zool., 1850, p. 419). The type is faded and the bill is broken, but

¹Hellmayr, P. Z. S., 1911, p. 1153, foot-note.

the extension of the large spots on the breast to the abdomen at once marks it as belonging to the Colombian form. The differences which distinguish birds from Bolivia and southern Peru from Colombian and Ecuadorian specimens are evidently shown, in part at least, by specimens from Garita del Sol on the Amazonian slopes of the Andes, east of Lima, Berlepsch (P. Z. S., 1896, p. 376) remarking that a pair of birds from this locality resemble specimens from Bolivia. He also here comments on the characters shown by the Colombian bird and, misled by Lafresnaye's statement that the type of *triangularis* came from Bolivia, he described the Colombian form as "*D. triangularis bogotensis*," a name which is obviously a pure synonym of *Xiphorhynchus triangularis triangularis*.

Since four specimens from Zamora, in southeastern Ecuador, are essentially typical of true *triangularis*, it is evident that if this form intergrades with *bangsi* it must do so between Zamora and Garita del Sol. It seems particularly appropriate to name this strongly marked race in honor of Mr. Outram Bangs, not alone in recognition of the services he has so long rendered neotropical ornithology, but also because his studies of the Lafresnaye types now in the collection of which he has charge, have already thrown, and promise to continue to throw, much light on problems which only a study of the type concerned can solve.

***Thripobrotus layardi madeiræ*, new subspecies.**

Subspecific characters.—Similar to *Thripobrotus layardi layardi* (Scl.), but ground color of the under parts browner; its streaks somewhat narrower and tinted with buff; the unspotted throat area smaller and buffy instead of white; the abdomen less streaked. Wing 95; tail 78.5; culmen 27 mm.

Type.—No. 148,455, Am. Mus. Nat. Hist., ♂ ad., Porto Velho, Rio Madeira, Brazil, April 3, 1915; Collins-Day Exp., Geo. K. Cherrie.

Specimens examined.—*Thripobrotus layardi madeiræ*. Brazil: Type locality, 2 ♂; Barão Melgaco, Gy-Parana, Brazil, 1 ♀ im.

Thripobrotus layardi layardi. Brazil: Utinga, near Para, 1 ♂, 1 ♀ (topotypes).

Thripobrotus fuscicapillus. Bolivia: Todos Santos, Rio Chapare, Prov. Cochabamba, 1 ♂. Peru: Astillero, Rio Tambopata, 1 ♀; Rio Cosireni (lower Urubamba), 1 ♂.

Remarks.—Hellmayr (Verh. Orn. Gesell. Bayern, XI, 1912, p. 161), after comparing Peruvian specimens with the type of *Thripobrotus fuscicapillus* (Pelz.), considers them inseparable from that species and, accepting this conclusion as valid, it is clear that our birds from Porto Velho are not referable to that form, which is represented in our collections by three examples. Nor does the material at hand indicate intergradation of *fuscicapillus* with *layardi* through the race here described, which, although slightly approaching *fuscicapillus*, is nevertheless much nearer to *layardi*.

A female from Barão Melgaco, on the Gy-Parana, still wears most of the juvenal plumage. The forehead and sides of the head are spotted with fulvous, the nape and sides of the hind head are slightly streaked with the same color. The under parts agree in general tone of color, but are less sharply streaked and the central stripes are whiter. Doubtless because

of its immaturity, this bird is considerably smaller than any of our other specimens of this group. Wing 85; tail 73; culmen 25 mm.

***Thripobrotus warscewiczii bolivianus*, new subspecies.**

Subspecific characters.—Similar to *Thripobrotus warscewiczii warscewiczii* Cab. & Hein., of Peru, but ground-color of under parts somewhat more olivaceous, its central stripes broader, margined laterally, but not terminally, with black; throat appreciably buffier and without blackish margins; maxilla paler.

Type.—No. 137,393, Am. Mus. Nat. Hist., ♂ ad., Incachaca, 7700 ft., Prov. Cochabamba, Bolivia; May 14, 1915; Miller & Boyle.

Range.—Subtropical Zone in Bolivia.

Specimens examined.—*Thripobrotus warscewiczii bolivianus*. Bolivia: Type locality, 4 ♂, 4 ♀; Miguelita, 5000 ft., Prov. Cochabamba, 1 ♂, 1 ♀; Locotal, 5800 ft., Prov. Cochabamba, 1 ♂, 2 ♀; "Yungas," 6000 ft., 1.

Thripobrotus warscewiczii warscewiczii Cab. & Hein. Peru: San Miguel Bridge, 5000 ft., Urubamba Cañon, 1 ♀.

Thripobrotus warscewiczii aquatorialis (Menegaux). Peru: Alamor, 4300 ft., Prov. Tumbes, 1 ♂; Ecuador: Zaruma, Prov. del Oro, 1 ♀, Gualea, Prov. Pichincha, 2 ♂, 1 ♀. Colombia: Riquarte, Nariño, 1 ♂.

Thripobrotus lacrymiger lacrymiger and *T. l. sancta-martae*, adequate series from Colombia.

Remarks.—I have to thank Mr. C. B. Cory for comparing our specimens of *Thripobrotus warscewiczii* with specimens of *T. w. warscewiczii* in the Field Museum from Molinapampa, and hence topotypical of *peruvianus* Tacz. (P. Z. S. 1882, p. 28, Tamiapuma, Peru). Mr. Cory writes that he considers our specimen from the Urubamba Cañon "to be nearly or quite typical *warscewiczii*" and this name is evidently therefore applicable to all the birds of this species from Peru with the possible exception of those found near the Bolivian boundary, which may be nearer *bolivianus*, and those from the Ecuadorian boundary, which, our Alamor specimen indicates, are nearer *aquatorialis*. Mr. Cory also calls my attention to the description by Menegaux of the Ecuador form as *aquatorialis* (Rev. Franç. d'Orn., 1912, p. 389, Cayandeled, Ecuador), which I overlooked when writing of specimens from southwestern Colombia and Gualea, Ecuador (Bull. A. M. N. H., XXXVI, 1917, p. 423). These birds, with others from Zaruma and Alamor, are decidedly more rufous, both above and below, than true *warscewiczii*, and show that *aquatorialis* is a valid, if but slightly differentiated race.

In pattern of marking the Bolivian form here described (as remarked in the paper just referred to), resembles *T. l. sancta-martae*, but the latter is more rufous throughout and the throat as well as central stripes below are ivory white.

***Mecocerculus subtropicalis*, new species.**

Specific characters.—Similar to *Mecocerculus stictopterus taniopterus* (Cab.) but back greener, cap grayer and less sharply defined from nape,

wing-coverts whiter and broader, ear-coverts grayer, superciliary less extended posteriorly, abdominal region more yellow; size smaller.

Type.—No. 273,007, U. S. Nat. Mus., ♂ ad., San Miguel Bridge, 5000 ft., subtropical zone, Urubamba Cañon, Peru; June 22, 1915; E. Heller.

Description of type.—Whole crown neutral gray, spreading on to the nape and not sharply defined from the Kronberg green ("olive-green") back; a white superciliary reaching to behind the eye; lores dusky; cheeks and ear-coverts grayish white, the latter tipped with the color of the sides of the nape; tail hair-brown, very narrowly margined externally with the color of the back; the outer web of the outer pair of feathers paler basally, no trace of whitish on the inner web of any of the rectrices; wing-quills fuscous, margined with whitish on the inner webs and pale greenish on the outer webs. Median and greater coverts broadly margined with greenish white; lesser wing-coverts the color of the back; bend and lining of the wing citron-yellow; throat and upper breast grayish white, the rest of the under parts whiter, washed, or faintly and obscurely streaked, with pale citron-yellow, brighter on the sides and flanks; feet and bill black, the maxilla pale basally. Wing 60; tail 56; tarsus 16.5; culmen 9 mm.

Description of female.—The female resembles the male in color, but is smaller in size. Wing 58; tail 51; tarsus 16.5; culmen 9.

Specimens examined.—*Mecocerculus subtropicalis*. Peru: Type locality, 1 ♂, 2 ♀, 1 ?; Idma, 1 ♂, 2 ♀.

Mecocerculus stictopterus taniopterus. Peru: Above Torontoy, 10,700 ft., 1 ♂, 1 ♀; Occobamba Valley, 9100 ft., 1 ♂.

Mecocerculus stictopterus stictopterus. Ecuador: Chimborazo, 1 ♂; Colombia: Temperate Zone, 6 ♂, 1 ♀.

Mecocerculus hellmayri. Bolivia: Incahaea, 3 ♂, 2 ♀.

Remarks.—The apparent abundance of this proposed new species prompts the belief that it has been before described but if this be true, it was presumably not referred to the genus *Mecocerculus*. On the other hand, it is so clearly a member of that genus that it could not well be placed in any other. Possibly the lack of a clear conception of its zonal relationships with *M. s. taniopterus* may have led to the belief that it was not separable from that species. Inaccurate labeling might readily lead to the belief that both birds came from the same locality, whereas *taniopterus* is found in the Temperate Zone and *subtropicalis* in the Subtropical Zone.

Both *M. colopterus* and *M. paucilocercus* have the inner web of certain remiges white; while in *M. hellmayri* and *M. minor* the wing-bars are ochraceous; in *subtropicalis* the inner webs of the rectrices are without white and the wing-bars are greenish white.

Anæretes agraphia, new species.

Specific characters.—Quite unlike any described species of the genus, but most nearly resembling *Anæretes agilis* Sel., from which it differs in having no streaks above or below, the crest wholly black, etc.

Type.—273,008, U. S. Nat. Mus., ♀ ad., Idma, 9000 ft., near Sta. Ana, Peru; October 10, 1915, E. Heller.

Description of type.—Crown and elongated feathers of the crest shining

black without white markings; a well-marked white superciliary; back olive-brown, unstriped; the sides of the nape and neck grayer; ear-coverts gray; a dusky postocular stripe; tail strongly graduated, brownish fuscous margined with the color of the back and tipped with whitish; wing-quills darker, the inner ones margined externally with the color of the back; throat whitish; breast grayish; abdominal region and flanks pale sulphur-yellow; under parts unmarked except for a slight suggestion of stripes on the breast. Wing 54; tail 58; tarsus 18.5; culmen 11; width of bill at base 4.5 mm.

Specimens examined.—*Anaretes agraphia*. Peru: The type.

Anaretes agilis. Colombia: near Bogotá, 3; Valle de las Pappas, 1. Ecuador: Mindo, 1; Gualea, 2; Pichincha, 1.

Remarks.—This is the second known member of that section of the genus *Anaretes* of which *A. agilis* has heretofore been the only described species. Compared with *A. parulus* these birds evidently possess well-marked generic characters, but the differences in question are in part bridged by *A. nigricristatus* in which the bill is broader, the tail more graduated, than in *parulus*; while *A. flavirostris* is, in respect to these characters, intermediate between *nigricristatus* and *parulus*.

***Mionectes striaticollis columbianus*, new subspecies.**

Subspecific characters.—Most nearly related to *Mionectes striaticollis poliocephalus* (Tsch.) of Peru, but smaller; the upper breast olive-green rather than gray; the white streaks of throat and breast much narrower and more restricted; the plumbeous of the crown less extended, not reaching back of nape or ear-coverts. ♂, wing, 63–70; tail, 48–52 mm.

Type.—No. 133,683, Am. Mus. Nat. Hist., ♂ ad., Sta. Elena, 9000 ft., Antioquia, Colombia, November 21, 1914; Miller & Boyle.

Specimens examined.—*Mionectes striaticollis columbianus*. Colombia: Type locality, 1; east of Palmira, Cen. Andes, 1; El Roble, Cen. Andes, 2; La Candela, Cen. Andes, 3; Cerro Munchique, W. Andes, 1; San Antonio, W. Andes, 1; Subia, near Bogotá, 1.

Mionectes striaticollis poliocephalus. Peru: San Miguel Bridge; Urubamba Cañon, 3; Idma, above Sta. Ana, 6.

Mionectes striaticollis striaticollis. Bolivia: Locotal, Prov. of Cochabamba, 5; Yungas, Prov. Cochabamba, 4; Incachaca, Prov. Cochabamba, 2.

Remarks.—The receipt of an adequate series of specimens of the Peruvian form of *Mionectes striaticollis* confirms my expressed belief that the Colombian bird is separable from it (Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 448).

The extremes of variation are represented by the Bolivian bird at the south, the Colombian bird at the north. Between these, but, as might be expected, nearer the former than the latter, is the Peruvian form which is sufficiently distinct from *striaticollis* to stand as a separate race, distinguished chiefly by its less streaked under parts, including the lower tail-coverts.

***Myioborus melanocephalus bolivianus*, new subspecies.**

Subspecific characters.—Similar to *Myioborus melanocephalus melanocephalus* (Tsch.) of Peru, but under parts paler, lemon-chrome rather than light cadmium; frontal band narrower and often mixed with black; the outer tail-feathers with more white, the white area on the inner vane of the terminal half of the third feather (from without) larger than the black area; wing averaging shorter; bill longer; wing 67; tail 67; culmen 10.5 mm.

Type.—No. 137,927, Am. Mus. Nat. Hist., ♂ ad., Incachaca, 7700 ft., Prov. Cochabamba, Bolivia; May 24, 1915; Miller & Boyle.

Specimens examined.—*Myioborus melanocephalus bolivianus*. *Bolivia*: Type locality, 5 ♂, 11 ♀.

Myioborus melanocephalus melanocephalus. *Peru*: San Miguel Bridge, Urubamba Cañon, 5 ♂, 4 ♀; Torontoy, 1 ♂, 4 ♀; Santo Domingo, 6 ♂, 1 ♀; Oconeque, 1 ♂.

Remarks.—Specimens from Santo Domingo and Oconeque in south-eastern Peru are intermediate. In the color of the under parts they are nearer *bolivianus*, but in tail characters they agree with true *melanocephalus*.

***Basileuterus luteoviridis superciliaris*, new subspecies.**

Subspecific characters.—Similar to *Basileuterus luteoviridis luteoviridis* (Bonap.) of Colombia, but averaging slightly smaller, with a longer bill, rictal bristles more developed; the entire upper parts decidedly browner, the yellow superciliary much broader, brighter, in some specimens broader even than in "*Myiothlypis*" *nigrocristatus*, when it leaves an olive-green area on the crown about equal to the black area in the crown of that species. Differing from *Basileuterus luteoviridis striaticeps* Cab., and from *B. l. signatus* Berl. & Stolz. through the lack of even a trace of black on the forehead and crown, which is exactly concolor with the back; from specimens of *signatus* which lack black on the crown, it differs as it does from true *luteoviridis* and, furthermore, in being larger; wing 69.5; tail 57; culmen 12 mm.

Type.—No. 273,009, U. S. Nat. Mus., ♂ ad. Above Torontoy, 14,000 ft., Urubamba Cañon, Peru; May 14, 1914, E. Heller.

Specimens examined.—*Basileuterus luteoviridis superciliaris*. *Peru*: Type locality, 3; Cedrobamba, 12,000 ft., 1.

Basileuterus luteoviridis luteoviridis. *Colombia*: 4.

Basileuterus luteoviridis signatus. *Peru*: San Miguel Bridge, Urubamba Cañon, 5000 ft., 4 ♂, 2 ♀; Torontoy, 7800 ft., 2 ♂, 4 ♀; Santo Domingo, 6000 ft., 4; Oconeque, 1. *Bolivia*: Incachaca, 7700 ft., Prov. Cochabamba, 5.

Remarks.—This form is apparently a Temperate Zone representative of *Basileuterus luteoviridis signatus* which occurs on the same mountains in the Subtropical Zone. Its zonal relations are presumably with "*Myiothlypis*" *striaticeps* Cab.,¹ described from Maraynioc, in the humid Temperate Zone, east of the Junin region. The latter, however, is larger and is described as having "einen breiten schwärzlich olivenbraunen" stripe

¹J. f. O., 1873, p. 316.

on the crown bordering the yellow superciliary, whereas in *superciliaris* the crown and forehead are of exactly the same color as the back. It is, however, interesting to observe that three of our sixteen Peruvian specimens of *signatus* from the Subtropical Zone show this character of a dusky stripe on the sides of the crown above the yellow superciliary, and this feature is more pronounced and more constant in five specimens from the Subtropical Zone of Bolivia.

This character clearly suggests relationship with "*Myiothlypis*" *euphrys*, the Bolivian representative of *nigrocristatus*, and this, in turn, raises the question of the status of *Myiothlypis* as a genus. The case has an important bearing on the problem of the origin of zonal faunas, and I trust to return to it at a later day with both increased material and added field experience.

***Pheucticus uropygialis terminalis*, new subspecies.**

Subspecific characters.—In the comparative absence of black markings on the sides and flanks, and in the large size of the white endings of the greater wing-coverts, resembling *Pheucticus uropygialis meridensis* Riley, of Venezuela; in the extent of yellow anteriorly on the bases of the feathers of the interscapulum nearer *meridensis* than to *Pheucticus uropygialis uropygialis* Scl., of Colombia; differing from both *meridensis* and true *uropygialis* in having large white terminal, or slightly subterminal, rounded spots on the upper tail-coverts instead of small white or yellowish transverse subterminal marks on these feathers; lower tail-coverts whiter; tibiae yellower.

Type.—No. 145,557, Am. Mus. Nat. Hist., [♂], San Miguel Bridge, Urubamba Cañon, 5000 ft., Peru; July 19, 1916; H. Watkins.

Specimens examined.—*Pheucticus uropygialis terminalis*. Peru: Type locality, 1 [♂]; Chauillay, Urubamba River, 3700 ft., 1 [♂].

Pheucticus uropygialis uropygialis. Ecuador: 1 ♂; Mocha, Chimborazo, 1 ♀. Colombia: Subia, 2 ♂; La Mar, 1 ♂; Palo Hueco, 1 ♂; Fomeque, 1 ♂; Chipaque, 2 ♂ (all near Bogotá and hence topotypical).

Pheucticus uropygialis meridensis. Venezuela: Near Merida, 5 ♂ (topotypical).

Remarks.—*Pheucticus uropygialis* does not appear to be represented in most Peruvian collections. Kalinowski secured a female near Cuzco, which von Berlepsch, in reporting on his collections (Ornis, 1906, p. 103), states he had not seen. Jelski took it near Huanta and it is contained in the Raimondi collection from Huancayo. It was probably on Raimondi's specimens that Taczanowski (Orn. Per., III, p. 2) based his description in which the words "sus-caudales noires terminées d'une grosse tache blanche" indicate that he evidently had the race here described in hand. This white spot on the longest tail-covert of the type is terminal and measures 8 mm. along the shaft of the feather. In a second male, which is in the molt, and in which this covert has not yet attained its full growth, it measures 12 mm. and is margined by a black border 3 mm. in width.

A female collected by Heller does not agree with the female of *aureiventris*, as stated by Taczanowski, but differs from it in having the throat

and breast streaked with black, the upper parts pronouncedly blacker and the rump yellow, in strong contrast to the back. This female closely resembles one of true *uropygialis* from Ecuador, but has the white terminal markings of both wing-coverts and upper tail-coverts larger.

Catamenia analoides griseiventris, new subspecies.

Subspecific characters.—Male similar to male of *Catamenia analoides analoides* (Lafr.), of the Peruvian coast region, but abdominal region grayer, less white, the under parts therefore nearly uniform in color; second to sixth primaries (from without) with less white on their outer webs at the base; lower tail-coverts averaging paler and usually without the buffy tips which are always present in true *analoides*.

Type.—No. 129,178, Am. Mus. Nat. Hist., ♂ ad., Cuzco, Peru, November 16, 1914; H. Watkins.

Specimens examined.—*Catamenia analoides griseiventris*. Peru: Type locality, 1 ♂, 1 ♀; Pisac (near Cuzco), 4 ♂, 2 ♀; Chospayoc, 10,000 ft., 1 ♂; Huaracundo Cañon, 10,000 ft., 2 ♂, 1 ♀; Torontoy, 8000 ft., 1 ♂. Ecuador: Valle de Cumbaza, Chimborazo, 3 ♂.

Catamenia analoides analoides. Peru: Lima, 2 ♂, 1 ♀; Vitarte (near Lima), 9 ♂, 5 ♀; Huacho (north of Lima), 1 ♂, 2 ♀; Huaral (north of Lima), 5 ♂, 1 ♀; Sayun, 1 ♂.

Remarks.—Our excellent series of this species shows that most of the differences between specimens from the coast and those from the tableland of Peru, to which Taczanowski (Orn. Per., III, p. 21) long ago called attention, are diagnostic. The fact that specimens from the tableland of Ecuador agree with those from southern Peru, indicates that the race here described occupies the puna or paramo in both Ecuador and Peru, while true *analoides* is doubtless confined to the coastal region.

It is interesting to observe that *griseiventris*, in its gray abdomen and decreased amount of white at the base of the primaries, makes no approach toward the Bolivian *analis*, which indeed more closely resembles the Lima race than it does the one geographically nearest to it.

The Colombian form, *C. a. schistaceifrons*, is also more like the one occupying the Peruvian coast than the race which inhabits the intervening mountains.